## **Heat Injury Prevention Chart**

Fluid Replacement Guidelines for Warm Weather Training (Applies to average heat acclimated soldier wearing BDU, Hot Weather)

| Heat       | WBGT<br>Index, ⁰F | Easy Work |                           | Moderate Work |                           | Hard Work |                           |
|------------|-------------------|-----------|---------------------------|---------------|---------------------------|-----------|---------------------------|
| Category   |                   | Work/Rest | Water<br>Intake,<br>Qt/hr | Work/Rest     | Water<br>Intake,<br>Qt/hr | Work/Rest | Water<br>Intake,<br>Qt/hr |
| 1          | 78-81.9           | NL        | 1/2                       | NL            | 3/4                       | 40/20 min | 3/4                       |
| 2 (Green)  | 82-84.9           | NL        | 1/2                       | 50/10 min     | 3/4                       | 30/30 min | 1                         |
| 3 (Yellow) | 85-87.9           | NL        | 3/4                       | 40/20 min     | 3/4                       | 30/30 min | 1                         |
| 4 (Red)    | 88-89.9           | NL        | 3/4                       | 30/30 min     | 3/4                       | 20/40 min | 1                         |
| 5 (Black)  | > 90              | 50/10 min | 1                         | 20/40 min     | 1                         | 10/50 min | 1                         |

- The work rest times and fluid replacement volumes hydration volumes will sustain performance for at least 4 hours of work in the specified heat category. Individual water needs will vary approx 1/4 gt or 8 ounces per hour.
- NL= no limit to work time per hour.
- Rest means minimal physical activity (sitting or standing), accomplished in shade if possible. **CAUTION: Hourly fluid intake should not exceed 1**<sup>1/2</sup> **quarts.**
- Daily fluid intake should not exceed 12 quarts.
- Wearing body armor adds 5 degrees Fahrenheit to WBGT Index
- Wearing MOPP overgarment add 10 degrees Fahrenheit to WBGT Index.

## **Examples of Work Load Categories:**

| Easy Work   | Moderate Work   | Hard Work  |
|---|---|--|
| <ul> <li>Walking hard surface at 2.5 mph, ≤ 30-pound load</li> <li>Weapon maintenance</li> <li>Manual of Arms</li> <li>Guard duty</li> <li>Marksmanship training</li> <li>Drill and ceremony</li> </ul> | <ul> <li>Walking loose sand at 2.5 mph, no load</li> <li>Walking hard surface at 3.5 mph, ≤ 40-pound load</li> <li>Calisthenics</li> <li>Patrolling</li> <li>Individual movement techniques; i.e. low crawl, high crawl</li> <li>Defensive position construction</li> </ul> | <ul> <li>Walking hard surface at 3.5 mph, ≥ 40-pound load</li> <li>Walking loose sand at 2.5 mph with load</li> <li>Field assaults</li> <li>Rifle bayonet training</li> <li>Road march &gt; 4 mph</li> </ul> |

Note: Soldiers who are overweight, dieting, or past heat casualties are more prone to heat injuries. As a result, their activities must be closely monitored.